Yard and Garden - 03-14-09 - Ted Griess / Extension Horticulture Assistant

Most gardeners know that light, moisture, temperature, and air are essential ingredients for plants to grow successfully. Furthermore, depending on the species of plant, each ingredient must be present in the proper amount to attain quality growth. For the past ten weeks, all four of these plant requirements have been working collectively to achieve astonishing results.

In my column of January 10, 2009, I wrote about a most unusual gift that Rita and I received for Christmas. It is called an Aero Garden. As I stated in that article, this gadget is a unique, automated system for growing plants indoors without the use of soil. Only light, air, appropriate temperature and water fortified with organic growing nutrient material are needed to make this space-age, plant-growing device work. While growing



in this mechanism, the roots of the plants are suspended in a highly oxygenated chamber consisting of 100 percent humidity. With great audacity, the manufacturer boasts that plants growing in an Aero Garden will grow five times faster than those same plants growing in soil. Although I can't corroborate that statement, both Rita and I have been impressed with its performance.

We placed our Aero Garden on a table near the north wall of our kitchen in front of a window. I've attached a photograph as a testimony of how superbly our Aero Garden is functioning. For nearly six weeks, Rita has been joyfully harvesting basil, chives, thyme, dill, mint and oregano.

However, today's column is not only to report on the spectacular results of our Aero Garden but also to relay a secondary observation. On the table, near the Aero Garden, sits a potted African violet. The potted plant has been located on this table for over a year. Before the Aero Garden, the violet performed reasonably well while receiving routine care and filtered sunlight from the kitchen window. During that time, it bloomed, but only sporadically and with few blossoms. Now, having placed the Aero Garden next to this plant, amazing things have happened. The violet is now





covered with a multitude of brilliant purple flowers. This plant has been blooming profusely for nearly two months. Other than its placement near the Aero Garden, nothing has changed in the care of this plant.

Most plant enthusiasts know that African violets require above average care compared with other houseplants. They are extremely sensitive to dryness; therefore,

checking the water daily is important. When the soil feels dry to the touch, one should water using lukewarm water rather than cold tap water. Most African violet growers water from the bottom; however, overhead watering can be applied as long as one is careful not to wet the leaves. Wet leaves promote disease. African violets prefer daytime temperatures near 72 degrees F. and evening temperatures should not fall below 62 degrees F. African violets bloom best in bright light, but should not be exposed to direct sunlight. Placing them near an east or north window generally provides an adequate light exposure.

For the past year, Rita has diligently provided proper care to her violet. It was when we placed the Aero Garden near it that marked changes occurred. Over the past two months this plant has become more robust. It has larger, darker green leaves and more of them. The most notable change is the multitudes of blossoms that appear repeatedly. We can only attribute this remarkable transformation to the Aero Garden's light source. Unfortunately, nowhere in the literature of our Aero Garden could I find how powerful the lights are, but I do know they produce a full spectrum of intense light, and the light remains on fourteen hours a day.

From all these observations, Rita and I are convinced the Aero Garden is a plant growing apparatus which lives up to its reputation. We have also learned that although air, water and temperature play an important role in plant growth, one should never under estimate the power of light.